

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/676,752	10/01/2003	Donald Alfons Kubik	NTIC-F-CON-CIP 7936 (NTICPO113		
	7590 12/27/200 NK & FARINE, CO., 1	EXAMINER			
2020 FRONT S		TOOMER, CEPHIA D			
SUITE 307 CUYAHOGA I	FALLS, OH 44221		ART UNIT	PAPER NUMBER	
001111100111			1714		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS		12/27/2006	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applic	ation No.	Applicant(s)			
		10/676	,752	KUBIK ET AL.			
Office Action Summary			ner	Art Unit			
		Cephia	D. Toomer	1714			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
	Period for Reply						
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE Management of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum stare to reply within the set or extended period for reply reply received by the Office later than three months at ed patent term adjustment. See 37 CFR 1.704(b).	AILING DATE OF of 37 CFR 1.136(a). In no unication. tutory period will apply an will, by statute, cause the	THIS COMMUNICATION  event, however, may a reply be tind  d will expire SIX (6) MONTHS from application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status							
1) 又	Responsive to communication(s) file	d on 10 October 2	<u>006</u> .				
•	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
- 4)⊠	Claim(s) 1-6 and 16-37 is/are pending	g in the applicatio	n.				
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-6 and 16-37</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restric	tion and/or election	n requirement.				
Applicati	ion Papers						
	The specification is objected to by the	e Examiner.		•			
•	The drawing(s) filed on is/are:		b) objected to by the	Examiner.			
,	Applicant may not request that any object	•					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	, ,		F-73				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
2) Notice of Draitsperson's Patent Drawing Review (PTO-940)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:							

Application/Control Number: 10/676,752

Art Unit: 1714

#### **DETAILED ACTION**

This Office action is in response to the amendment filed October 10, 2006 in which claims 1-5 were amended and claims 16-37 were added.

The provisional double patenting rejection over copending application 10/676,760 is withdrawn in view of Applicant's filing of a terminal disclaimer.

#### **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11.F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-6, 16-32, 34 and 36 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5-7, 17-19, 23-25, 35-39, 46, 47 and 49 of copending Application No. 10/396067.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the concentrate adapted to be diluted with a diluent polymer

Art Unit: 1714

contains all of the components set forth in the biodegradable polymer article of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 4. Claims 16-22, 25 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 5. Claims 16-18 are rejected because the specification does not provide support for the particle size of 1 to 45 microns.
- 6. Claims 19-22 are rejected because the specification does not provide support for the language "wherein <u>said remainder of said composition</u> is substantially said biodegradable or said non-biodegradable diluent polymer.
- 7. Claim 25 is rejected because the specification does not provide support for the adjuvant comprising a mixture of fumed silica and calcium carbonate.

Application/Control Number: 10/676,752 Page 4

Art Unit: 1714

8. Claim 26 is rejected because the specification does not provide support for the language "wherein said biodegradable polymer or said non-biodegradable polymer constitutes substantially the remainder by weight of said corrosion inhibiting composition.

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 4, 25, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 11. In claims 4 and 25, the parenthesis in the last phenolic compound is incorrect.
- 12. In claim 27, ")relative humidity)" should read --(relative humidity) --.
- 13. Claim 28 is rejected because claim 27 does not provide antecedent support for ethylene/vinyl alcohol.

## Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/676,752

Art Unit: 1714

1. Claims 1, 2, 4-6, 16-22, 26-31, 33, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boerwinkle (US 4,290,912) in view of Schmidt (US 3,354,117) and Wysong (US 4,119,604).

Boerwinkle teaches plastic articles comprising a polyolefin polymer, an inorganic nitrite salt, a trisubstituted phenol and fumed silica (see abstract; col. 1, lines 30-41). The polyolefin includes low density polyethylene, polypropylene, etc. (see col. 1, lines 53-56; Example 3). The nitrite is sodium nitrite (see col. 1, lines 61-64). Boerwinkle teaches that the composition provides volatile corrosion inhibition for sheet materials useful for packaging metal parts (see col. 1, lines 17-22; col. 2, lines 59-62). Boerwinkle teaches the limitations of the claims other than the differences discussed below.

In the first aspect, Boerwinkle differs from the claims in that he does not specifically teach the addition of zinc oxide or sodium silicate.

However, Schmidt teaches stabilized olefin compositions comprising 2,4,6-trisubstituted phenol and zinc oxide. Schmidt teaches that zinc oxide is used in polyolefins as a stabilizer and filling material (see abstract).

Wysong teaches a polymer composition wherein the adjuvants commonly used in polyolefin resins include butylated hydroxytoluene, fumed silica and sodium silicate (see col. 6, lines 34-60).

It would have been obvious to one of ordinary skill in the art to include sodium silicate or zinc oxide in the polymer composition because Schmidt and Wysong teach that these compounds are adjuvants commonly used in polyolefin resins.

Application/Control Number: 10/676,752 Page 6

Art Unit: 1714

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the adjuvant components through routine experimentation for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

2. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that Schmidt is directed to the addition of organic phosphorus compounds in combination with known stabilizers. Applicant argues that Schmidt lacks any teaching or suggestion of biodegradable polymers, an alkali metal silicate, sodium nitrite as well as the claimed adjuvant. Applicant argues that Schmidt is non-analogous art.

The primary reference, Boerwinkle, teaches plastic articles having volatile corrosion inhibiting properties wherein the plastic article comprises polyolefins. Schmidt teaches that a polyolefin composition may be additionally stabilized with zinc oxide and 2, 4, 6-trisubstitued phenols. Therefore, there is clear motivation for combining the references and Schmidt is clearly analogous art. With respect to Applicant's statement that Schmidt fails to teach a biodegradable polymer, alkali metal silicate, sodium nitrite

Application/Control Number: 10/676,752

Art Unit: 1714

and the claimed adjuvant, Schmidt was not relied upon for teaching these components.

Applicant's arguments regarding intended use is given no weight because the claims are directed to the composition per se.

Applicant's data have been considered but are not deemed to constitute unexpected results. The showings are not commensurate in scope with the claims. The claims read on far more polymers that disclosed and the proportions in the claims are much broader than those in the examples.

Applicant argues that Wysong's field of endeavor and Applicant's are decidedly different and the Wysong lacks any suggestion of using sodium nitrite. Applicant argues that one skilled in the art would not be motivated to include sodium silicate in the polymer composition because it does not prevent corrosion on metals.

Wysong was relied upon for teaching conventional adjuvants that are used in polyolefin films, such as those of the primary reference Boerwinkle. Wysong teaches that sodium silicate is used as an inorganic filler. Boerwinkle teaches that fillers may be present in his composition. Therefore, the skilled artisan would not expect that sodium silicate compound to impart corrosion inhibiting properties to the polymer. With respect to Wysong not teaching the use of sodium nitrite, Wysong was not relied upon for that reason plus Boerwinkle teaches this limitation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

Application/Control Number: 10/676,752 Page 8

Art Unit: 1714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cephia D. Toomer Primary Examiner Art Unit 1714

10676752\20061221